Insight from dream and event discussions using the Schredl method of dreamwork in experienced and inexperienced dreamworkers

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Summary. Practitioners of dreamwork have long understood that exploring dreams has the potential to be a source of personal insight, but empirical research evidencing this has generally been lacking, especially in non-clinical settings. Additionally, many of the factors that influence dreamwork efficacy remain to be discovered. The present study aimed to provide evidence for the insight-generating potential of dreamwork, and to investigate a potential factor that may influence how effective a dreamwork session is: the level of experience of the dreamer. Participants (29 (15 experienced and 14 inexperienced in dreamwork)) took part in two discussions: a dream discussion and a waking-life event discussion, using the Schredl "Listening to the Dreamer" method of dreamwork and an adapted version of this for discussing waking-life events. Results indicated that dreamwork led to significantly higher levels of Exploration-Insight and Continuity Insight in comparison to a waking-life event discussion. Levels of Personal Insight did not differ between the two conditions, but also did not significantly differ from previous experiments' Personal Insight levels following dream discussion. Experienced and inexperienced participants' levels of insight were not significantly different. High variability in insight scores indicated that there were large differences between participants in terms of how effective the discussions were for generating insight, but this difference could not be accounted for by experience levels. Insights about changing one's life correlated with metaphor perception within the dream. These results illustrate the insight-generating potential of dreamwork for some individuals, irrespective of the dreamer's level of experience, and perhaps suggest that insight for change may come about following perception of metaphors for waking life in the dream.

Keywords: Dreamwork, dreaming, insight

1. Introduction

Practitioners of dreamwork have long understood that exploring dreams has the potential to be an excellent source of personal insight. For many of those who have worked with their own dreams, attended dream groups, or used dreamwork in therapy, it is clear that dreamwork is beneficial in many different ways. However, empirical research evidencing this has generally been lacking (Schredl, 2015). This can be a source of frustration for those who are keen to promote and utilise dreamwork, especially in a healthcare setting, where the lack of empirical evidence presents a barrier to allowing dreamwork to be used with patients, despite the benefits that practitioners often observe. Owing to the need for empirical evidence for the benefits of dreamwork, a panel was called at the 2014 conference of the International Association for the Study of Dreams to facilitate the collaboration of dreamworkers, dream group leaders, psychotherapists who use dreams, and dream researchers (Ashwill et al., 2014). The study presented here aims to contribute to this collaborative effort in providing evidence for the insight-generating potential of dreamwork.

Over the last few decades, researchers have made efforts to provide experimental evidence for the benefits of different methods of dreamwork. In particular, Clara Hill and her colleagues have made great strides in evidencing the benefits of her Cognitive-Experiential Dream Model (CEDM), in which a therapist and their client work together with a client's dream to explore it, draw insights from it, and determine future actions from it. Hill has provided extensive experimental and qualitative evidence illustrating that CEDM leads to personal insights, and helps clients make changes in their lives (see Hill, 2018, for a brief review of her work).

One of Hill's contributions in dreamwork efficacy research has been to trial various control conditions against which to compare dreamwork. If dreamwork efficacy is to be evidenced convincingly, it should have control conditions against which to compare it, to show that it is working with a dream specifically that produces insights (rather than simply discussing one's life with an interested person(s)). For example, Hill et al. (2000) found that dream discussions produced greater insights than discussions of loss, and Hill et al. (1993) found that dream discussions produced greater insights than discussing a waking-life event. Such studies indicate that there is something particular about discussing a dream that leads to more insight than other kinds of personal discussions.

The Cognitive-Experiential dreamwork method occurs within a therapist-client dyad, but there are many other types of dreamwork that are conducted outside of this type of clinical setting and that use different techniques to ex-

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plore the dream; thus, different outcomes may occur for different methods. Montague Ullman's Dream Appreciation method (Ullman, 2006) is not clinically oriented, and is typically conducted with a group of three to eight people. Despite the differences between the methods, empirical work conducted into the efficacy of the Ullman method has demonstrated that it too leads to very high levels of insight, on a level comparable to CEDM (Edwards et al., 2013). Further research has found that it leads to higher levels of insight than a discussion of a significant recent event from the dreamer's waking life (Edwards et al., 2015), and that it leads to higher levels of insight than a discussion of a daydream (Blagrove et al., 2019) (see Malinowski & Edwards, 2018, for a summary of this research).

Another group dreamwork method that has received some empirical investigation is the "Listening to the Dreamer" method developed by Michael Schredl (e.g. 2015). This method was developed to understand why the dreamer had the dream at that particular time in their life. It also looks for the underlying patterns in the dream. Although dreams may often seem bizarre and incorporate waking life in fragmented ways, we tend to behave the same way in our dreams as we would if the same situation arose in waking life (Kahn and Hobson, 2005). As such, the ways the dreamer acts and feels in the dream may help to connect it to waking life, even if the specific imagery of the dream is different from anything likely to occur in waking life. The method also allows the dreamer to consider ways of trying to solve problems in the dream, which may translate to waking life also. In this way, it has some similarity to CEDM and also to more nightmare-focused dreamwork such as Imagery Rehearsal Therapy.

Dreamwork sessions using this method create a slow teasing out of meaning and insight from the dream via gentle questioning from dream group members. Dreamers are asked questions to connect the dream to waking life, look for the underlying patterns in the dream, and ask the dreamer whether they would like to change how they acted in the dream. Dreamers often come to an "aha!" moment during the session, indicating that they have discovered something new about the dream and/or themselves. This method is particularly appropriate in a research context, both because of the gentle questioning style involved in the method, and because dream group members ask questions rather than offering any input into dream meaning. Both of these aspects of dreamwork are important to consider when using dreamwork in research, because the power dynamic established between researchers and participants puts participants into a vulnerable position when sharing something as personal as a dream, and because it also makes participants more likely to agree with the researchers' input than might be case in more informal dream groups.

Hill's CEDM, Ullman's Dream Appreciation, and Schredl's Listening to the Dreamer share some similarities with one another but are notably different, as summarised in Table 1. All three share a similar first stage: exploring the dream. In this stage, the dreamer is given space to share the dream, explore the different aspects of the dream, and make connections between the dream and their waking life.

The second stage is different for each method. In CEDM, the second stage is an insight stage, in which the therapist and client work together to construct meaning from the dream in terms of different aspects of the client, e.g. spiritual or relationships. In Dream Appreciation, the second stage involves members of the dream group offering their projections about the dream. Projections are prefaced with the phrase "if this were my dream…" to ensure that the members are not telling the dreamer what they think the dream means, but offering ideas about what it would mean to them, had they had the dream. In Listening to the Dreamer, the second stage involves drawing out patterns from the dream in terms of the emotions felt and the actions that happened, and seeing if these emotion and action patterns further associate to waking life.

In the final stage, both CEDM and Listening to the Dreamer involve the dreamer considering whether they would change the dream if they could go back and do it again, and how the changes they offered may parallel changes they would like to make in waking life. The final stage in Dream Appreciation is a group discussion, in which the dreamer responds to the group's projections and the group further assist the dreamer in making dream-waking life connections.

The Listening the Dreamer method thus is similar to the other two in the first stage and in Hill's Action stage, but is different in that it alone includes a pattern identification stage. It also differs from Hill in being designed for non-clinical settings, and from Ullman in that the dream group do not offer any projections.

Schredl's Listening to the Dreamer method was researched in the Edwards et al. (2015) study alongside the Ullman method. Insight scores for the dream discussion using the Schredl method were higher than those of the waking-life event discussion, but the difference did not reach significance. However, the mean scores for the dream discussion using the Schredl method were almost identical to those of the dream discussion using the Ullman method, and did not differ significantly from the weighted mean scores from the studies using the Hill method, indicating that the Schredl method is as good at eliciting insights from dreams as these more widely studied methods. The lack of significant difference between dream and event discussions for the Schredl method, then, may have occurred due to either the low sample size (N=9) and/or the higher levels of insight elicited in the waking-life event condition using the Schredl method compared to other methods. A replication of this study with a larger sample size is therefore warranted, and this was therefore the primary aim of the present study.

Table 1. The three dreamwork methods and their stages

Dreamwork method	Stage 1	Stage 2	Stage 3
Hill (Cognitive-Experiential)	Exploration	Insight	Action
Ullman (Dream Appreciation)	Exploration	Group projection	Group discussion
Schredl (Listening to the Dreamer)	Exploration	Pattern identification	Action

Edwards et al. (2013) differentiated between two different "aha" experiences that can occur during the course of dreamwork: the "aha" that comes from realising how the dream relates to one's waking-life; and the "aha" that comes from gaining insight into one's own life after working with the dream. The former can be conceptualised as a Continuity Insight "aha" – perceiving links, or the continuity, between the dream and waking life – and the latter as a Personal Insight "aha" – gaining new understandings about oneself from the dreamwork.

In the Gains from Dream Interpretation (GDI) questionnaire (Heaton et al., 1998), the Exploration-Insight subscale measures how effectively the dream session generates insights, but also how effectively the dream is explored within the session, which is not an insight measurement. Consequently, Edwards et al. (2015) developed an alternative subscale from the GDI using items that had face validity for a Personal Insight scale, which measures only the Personal Insight "aha!" described above, and not how well the dream was explored. This scale was found to have good reliability. The Ullman method resulted in higher levels of both Personal Insight and Exploration-Insight.

This leaves the first type of "aha", the Continuity Insight "aha", unmeasured. Item number 13 in the GDI is the only item to explicitly measure the making of wake-dream connections, so in the present study this item alone is used to measure the first type of "aha!", herein called Continuity Insight, after the Continuity Hypothesis of dreaming (Hall and Nordby, 1972).

Hill (2018) and Edwards et al. (2015) have also noted that many factors can influence the outcome of a dreamwork session, such as how involved the dreamer is in the session, how much experience the dream group leader has, and how much experience the dreamer has. A secondary aim of the study, therefore, was to investigate one of these factors: the dreamer's experience. Experienced participants may be more likely to gain insights due to their familiarity with the process of working with one's own dreams. Thus, half of the sample in the present study comprised experienced dreamworkers – they had had experience in working with their own dreams either in dream groups, in therapy as a patient or client, and/or in long-term dream journaling and working with their dreams individually. The other half of the sample were inexperienced, in that they had not worked with their dreams before.

In addition to investigating dreamwork efficacy, research into dreamwork needs to illustrate exactly what it is about dreamwork that generates insights. If it is the case that dreamwork elicits more insights than other kinds of personal discussions, what is it about the dream discussion that enables this to happen? One possibility is that the kinds of insights that are generated during dreamwork are merely to do with making connections between one's waking life and the dream. Thus, it would be expected that perceiving more continuity between the dream and one's waking life would lead to the generation of insight in the discussion.

Another possibility is that dreamwork facilitates the perception of metaphorical connections between the dream and waking life, and that this perception of metaphor may in turn lead to insights about the dreamer's life. There is agreement among some dream researchers that dreams can be metaphorical in the sense picturing aspects of waking life non-literally (e.g. Hall & Nordby, 1972, Hartmann, 1996; Malinowski & Horton, 2015), and there is evidence that some individuals perceive metaphorical content in their dreams (e.g. Malinowski, 2016). Furthermore, both qualitative research (e.g. Malinowski, Fylan, & Horton) and quantitative research (e.g. Davidson and Lynch, 2011) have found that dreams produce non-literal representations of experiences and thoughts from waking life. Perception of metaphorical connections may facilitate insight generation either simply through perceiving more connections to waking life, or through coming up with insights about one's life through this perception (Edwards et al., 2013).

Four hypotheses were formulated for the study. First, based on the notion that dreams may be a particularly beneficial resource for gaining personal insights, it was hypothesised that dream discussions would lead to more insight than discussing waking-life events. Second, since participants with experience of dreamwork may find it easier to be actively involved dreamwork sessions than those who have not experienced dreamwork before, it was hypothesised that participants experienced in dreamwork would gain more insight from dream discussions than those with no experience of dreamwork. Third, since the dreamwork discussions involved drawing out parallels between the dream and waking life, it was hypothesised that following dream discussions participants would perceive more continuity between the dream and their waking lives than they had perceived prior to the discussion. Finally, to test the idea that acquisition of insight following dreamwork may be related to perception of dream-wake metaphors, it was hypothesised that insight scores would correlate with the metaphorical perception of the dream following the dream discussion.

2. Method

2.1. Participants

29 (24 female, 5 male) participants took part in the research, with an age range of 19 to 78 (M=36.81, SD=15.74). These participants comprised 15 individuals inexperienced in dreamwork and 14 individuals experienced in dreamwork. The inexperienced participants were students at the University of Bedfordshire, who self-selected to participate. The age range of this group of participants was 19-56 (M=28.93, SD=12.34). The remaining 14 participants had some experience of dreamwork: they had taken part in dream groups, worked with dreams as trainee therapists, journaled and worked with their own dreams, or worked with dreams in another way (or a combination thereof). These 14 experienced participants were recruited through various means: via an email list of UK-based dreamworkers; via the International Association for the Study of Dreams newsletter; through the first author's personal network; and in an announcement at a public lecture. The age range of the second group was 30-78 (M=45.31, SD=14.86). No remuneration or incentive was offered to participants other than travel expenses for the second group.

2.2. Design

For the within-participants component of the experiment, there were two independent variables: discussion type (dream discussion vs event discussion) and pre- and post-discussion. Dependent variables were eight questions about the dream/event, and four Gains from Dream / Event Interpretation subscales (see Materials for details of these). The dream and event discussions were counterbalanced across

participants. For the between-participants component of the experiment, there was one IV, experience level, with two levels (experienced/inexperienced). DVs were insight measurements from the GDI/GDE: Exploration-Insight, Personal Insight, and Continuity Insight.

2.3. Materials

Participants rated the dream discussion using the Gains from Dream Interpretation (GDI) questionnaire (Heaton et al., 1998) and the Gains from Event Interpretation (GEI) questionnaire (Edwards et al., 2015). The GEI uses the same questions as the GDI, but changes the wording so that it can be used following a waking-life event discussion rather than a dream discussion. Both scales have three validated subscales: the Exploration-Insight subscale (this examines how effectively the discussion generates insight, and how effectively dreams/events are explored within the discussions); the Experiential subscale (this measures how engaged the individual felt in the discussion); and the Action subscale (this examines the degree to which the individual felt that the discussion inspired changes to be made in their life). Edwards et al. (2015) also validated a Personal Insight subscale using items from the GDI/GEI, to measure insight into one's life specifically, as opposed to the combination of insight and exploration in Heaton et al.'s subscale.

As well as the GDI and the GDE questionnaires, participants were also asked to answer some questions about the dream/event. They were asked to rate the dream/event using items following the 7-item version of the unpublished Continuity Questionnaire (Malinowski & Horton, 2013), which is designed to tap into seven factors of wake-to-dream continuity: continuity with present waking life, continuity with past waking life, continuity with waking-life emotions, similarity with waking life, discontinuity with waking life, bizarreness, and metaphorical continuity with waking life, all answerable on a scale of 0 to 9. The scale was adapted for use with the waking-life event discussion. In addition to these seven items, participants were asked to rate the pleasantness of the dream/event on a scale of 1 to 7.

For the dream, participants were also asked to read through their dream report and note any element in it that was relatable to their waking life. An 'element' could be a person, an animal, a location, an object, an emotion, an action or interaction, a thought, words or speech, something from a film/TV/book, or anything else that they recognised from their waking life. They were also asked to estimate when they had last experienced the element in their waking life.

2.4. Dreamwork method

There are six main stages to Schredl's (2015) "Listening to the Dreamer" method of dreamwork: 1) clarifying the dream in order to help the dreamer to re-experience the dream; 2) asking the dreamer what kind of waking-life memories are associated with the dream; 3) asking the dreamer about the basic action patterns and the basic emotions in the dream (without using the particular images of the dream); 4) asking the dreamer whether they see any parallels between the basic dream patterns and their current waking life; 5) asking the dreamer whether they would like to act differently now from what they did within the dream; 6) asking the dreamer whether some of the insights into the dream situation can be used for changing waking behaviour.

However, the way in which the authors applied the method was slightly amended from the original six stages. In the present study, before Stage 1, the participant read out a written copy of the dream/event to the group, who also had written copies to refer to. Additionally, Stages 3 and 4 were split such that the action and emotion patterns were considered individually, one at a time, in order to be able to methodically explore each stage separately. During the action/emotion pattern identification section, the first author made notes and read them back to the participant to help them with Stage 4. In addition to these changes, the authors allowed a more liberal interpretation of Stage 2. In the original design of the technique, associations made are only permitted to specific waking-life memories. In the application of the method in the present study, however, more general associations were allowed.

"Patterns" in the present study can be defined as the chronological progression of the 1) emotions experienced by the dreamer, and 2) actions experienced by the dreamer in the dream. For example, an emotion pattern could have been "I was curious, then scared, then relieved, and then happy". An action pattern could have been "I was walking alone, something started chasing me, I ran, and managed to escape". Once the patterns are identified, participants are asked to consider whether any further associations of the dream to waking life become evident based on their dream emotion and action patterns.

The two authors (JM and AP) acted as the dream/event group members, and asked the participants questions using the dreamwork method described above. For the event session, the stages were modified only as much as needed to make the stage make sense for use with an event report instead of a dream report. Due to unforeseeable circumstances at two of the sessions only one (JM) instead of two researchers acted as the dream/event group member.

2.5. Procedure

Participants responded to the advertised experiment by contacting the first author. They were provided with an information sheet, which gave full details of what participation entailed. The information sheet deliberately explained the potential benefits of both discussing a dream and discussing a waking-life event. This replicates the method of Edwards et al. (2015) and is intended to reduce bias towards seeing discussing dreams as more insight-generating than discussing waking events. Participants were given the opportunity to ask any questions they had about the study. Once the participant had read the information sheet and agreed to take part, a date was fixed for the session and the participant was instructed to email the first author with a written description of a dream and a personally-significant waking-life event. Both dream and event had to have occurred no more than a week prior to the scheduled meeting, in order to minimise memory flaws. Participants were asked to choose a dream and event that were not obviously related to one another to ensure that the second discussion would not overlap with the first. The first author printed out copies of the written reports of the dream and event for all three group members.

On the day of the session, the participant met with the first (JM) and second (AP) authors for the two discussions. Sessions were mostly conducted at the University of Bedfordshire and the University of East London, although some sessions were conducted in participants' homes for those

participants for whom travelling was an impediment to participation due to, for example, mobility issues. Dream-first or event-first were counterbalanced across participants. Before each discussion, participants were asked to answer some questions about the dream/event, as detailed in Materials. Aside from the GDI and GDE which were only administered after each discussion, the items were administered once before each discussion and once after each discussion. For example, if the participant was in the dream-first condition, they filled in the questions, had the dream discussion, and then answered the questions again plus the GDI. Following this there was a break, and then the same procedure was applied for the event discussion. Both dream and event discussions were audio-recorded. Altogether the sessions typically lasted approximately two hours, although this varied across participants.

After both discussions had finished, the researchers explained in more detail the specific aims and hypotheses of the research, and participants were given the opportunity to ask questions and feedback any thoughts about the study. This portion of the session was not audio-recorded.

Planned analyses were as follows. Firstly, to test the hypothesis that dream discussions would lead to more insight than event discussions, Paired Samples T-tests were planned with the following outcome variables: the Exploration-Insight subscale of the GDI/GEI, the Personal Insight subscale of the GDI/GEI, and item 13 from the GDI/GEI. Secondly, to test the hypothesis that experienced participants would obtain more insight than inexperienced participants, Independent Samples T-tests were planned for the same outcome measures. Thirdly, to test the hypothesis that the dream discussion would lead to the perception of more continuity between the dream and waking life, pre- and post-session Paired Samples T-tests were planned for the continuity outcome measures. Finally, to test the hypothesis that perception of metaphor arising from the discussions would relate to the amount of insight gained, bivariate correlations were planned between the metaphor perception item and the three insight variables: Exploration-Insight, Personal Insight, and Continuity Insight.

2.6. Ethical considerations

The study was designed in accordance with the ethical guidelines set out by the British Psychological Society, and received ethical approval from the University Research Ethics Committee at the University of East London and Research Centre for Applied Psychology's Research Ethics Committee at the University of Bedfordshire.

Participants were provided with an information sheet detailing the procedure of the study and what they would be asked to do. This document also explained some of the potential benefits of participation. Participants were asked not to participate if they had recently experienced a trauma, a bereavement, or any other extremely emotional event that would cause distress, owing to the fact that such experiences are often represented in dreams. Participants were also asked not to participate if they had a history of mental illness.

On the day of the discussion, the study was explained to participants again, and it was emphasised to participants that they did not need to share or disclose anything that they did not feel comfortable sharing. Their right to withdrawal was also emphasised. It was made clear to participants that the researchers would be posing questions to the participants throughout the session, and that they had the right not to a question that they preferred not to answer or that they did not know the answer to. Those who agreed to take part were asked to sign a consent form. During the session, participants were monitored for any signs of distress by both researchers, and if it was felt that the participant was becoming distressed in the discussion, or if the participant requested it themselves, the audio-recording was stopped to give the participant a break. If this happened, the researchers asked the participants if they would prefer to end the session, and again it was emphasised that it was their right to end the session if they preferred to. Although some participants found some parts of discussions difficult, no participants chose to end the discussion nor withdraw their data.

At the end of the session, participants were debriefed.

3. Results

The mean length of the dream discussion was 46.14 minutes (SD=16.63), and the mean length of the event discussion was 40.14 minutes (SD=13.93). The difference in length was significant, $t(28) = -2.57$, $p = .016$.

3.1. Insight: dream discussion vs. waking-life event discussion

To test the first hypothesis that more insight would be obtained following the dream than the event discussions, a 1-tailed Related-Samples Wilcox Signed Rank was conducted (due to non-normality of the data) comparing participants' mean scores on the Exploration-Insight subscales of the GDI and GDE. As predicted, the dream EI was significantly higher than event EI, $Z = -.18$, $p = .03$, while differences between the Experiential and Action subscales were not significantly different. The Personal Insight subscale posited by Edwards et al. (2015) had good reliability for both GDI (Cronbach's $\alpha = .82$) and GDE (Cronbach's $\alpha = .83$). The difference between mean for dream PI and event PI was non-significant, $t(28) = .54$, $p = .30$. However, the difference between Continuity Insight (item 13 of the GDI ("I was able to make some connections, that I had not previously considered, between images in my dream and issues in my waking life ") and the GDE ("I was able to make some connections, that I had not previously considered, between parts of the event and issues in my life)) was significant, $Z = -2.48$, $p = .006$. Table 2 reports the mean scores for each of these variables. The range of scores is reported to demonstrate the wide variability in scores between participants; while some participants reported low scores for each subscale/item, others reported the maximum available score (9).

To determine whether session length may have affected outcome measures, Pearson's bivariate correlations were performed between dream/event session length, GDI/GDE subscales, and Continuity and Personal Insight. No significant correlations were found.

Hypothesis 1 was partially supported: Exploration-Insight and Continuity Insight scores were higher after dream than event discussions, but Personal Insight scores were not.

Table 2. Range, mean, and SD for the three subscales of the GDI and GDE, the Personal Insight subscale and Continuity Insight

Subscale	Min score dream	Max score dream	Min score event	Max score event	Dream mean (SD)	Event mean (SD)	p	d
Exploration-Insight	3	9	4.57	9	7.54 (1.19)	7.09 (1.16)	.035*	.35
Experiential	2.50	9	5	9	7.55 (1.45)	7.68 (1.06)	.628	.10
Action	2.80	9	2.80	9	5.98 (1.67)	6.09 (1.73)	.726	.06
Continuity Insight	2	9	1	9	7.96 (1.75)	6.72 (2.09)	.006*	.64
Personal Insight	1.80	9	1.80	9	6.24 (1.78)	6.06 (1.80)	.30	.10

Note. *Significant at the $p < .05$ level.

3.2. Experienced vs. inexperienced participants

To test the second hypothesis that experienced participants would obtain more insight than inexperienced participants, a 1-tailed Independent Samples T-test was performed on the Exploration-Insight subscale of the GDI comparing experienced and inexperienced participants. Two-tailed t-tests were performed on the other two GDI subscales and on all three GDE subscales, since no differences were predicted for these tests. One-tailed tests were also performed on the two types of "aha!" experiences. Contrary to the prediction, there was no significant difference between experienced and inexperienced participants on Exploration-Insight scores, $t(15.10) = 0.92$, $p = .19$. There were no significant differences between any of the other measurements of the GDI/E. Table 3 reports the means and SDs for each of these scales/items.

Hypothesis 2 was not supported: experienced participants did not obtain more insight from their discussions than inexperienced participants.

3.3. Pre-discussion versus post-discussion dream scores

To test the third hypothesis that more continuity between the dream and waking life would be perceived following the discussion, pre-test / post-test analyses were conducted on the questions asked before and after the dream discussion. Tests were one-tailed for the items that denoted continuity with experiences and thoughts waking-life (current continuity, past continuity, emotional continuity, metaphorical continuity, and number of waking-life elements) and two-tailed for the others. A stepwise Bonferroni correction (Holm, 1979) was applied due to multiple testing. Significantly higher scores were reported after the dream discussion for the dream's continuity with the dreamer's current waking life, $t(24) = -2.68$, $p = .007$, $d = .39$, and for the number of waking life elements identified, $t(24) = -5.81$, $p < .001$, $d = .77$. There were medium sized effects for continuity with past and metaphorical continuity, but neither effect was significant. Table 4 reports the mean scores for each item pre- and post-discussion.

Hypothesis 3 was supported: more continuity with waking life was perceived following the dream discussion than had initially been perceived.

3.4. Correlations between metaphor and insight

To test the fourth hypothesis that insight from dreams might follow identification of metaphors for waking life in the dream, a bivariate correlation was conducted to measure the relationship between metaphorical perception of the

Table 3. Mean GDI/E subscale scores for inexperienced and experienced participants

Subscale	Inexperienced mean (SD)	Experienced mean (SD)	*p*
Dream Exploration-Insight	7.75 (0.48)	7.33 (1.64)	.19
Event Exploration-Insight	7.02 (1.29)	7.16 (1.05)	.74
Dream Experiential	7.97 (0.79)	7.11 (1.85)	.12
Event Experiential	7.73 (0.86)	7.64 (1.26)	.82
Dream Action	6.11 (1.55)	5.84 (1.84)	.78
Event Action	6.27 (1.72)	5.89 (1.77)	.56
Dream Personal Insight	6.31 (1.25)	6.17 (2.26)	.42
Event Personal Insight	5.94 (2.05)	6.19 (1.56)	.36
Continuity Insight Dream	8.21 (0.97)	7.71 (2.30)	.38
Continuity Insight Event	7.27 (1.58)	6.14 (2.45)	.31

Table 4. Mean scores on the nine dream items pre- and post-discussion

Item	Pre-discussion mean (SD)	Post-discussion mean (SD)	*p*	*d*
Pleasantness	4.52 (1.78)	4.35 (1.83)	.48	.09
Current continuity	5.24 (2.49)	6.12 (1.99)	.007**	.39
Past continuity	4.72 (3.08)	5.80 (2.69)	.02*	.37
Emotion continuity	6.40 (2.14)	6.80 (1.87)	.11	.20
Realistic	4.46 (2.14)	4.58 (2.36)	.83	.05
Different from waking life	4.80 (2.33)	4.48 (2.14)	.58	.14
Bizarre	5.20 (3.06)	4.92 (3.13)	.46	.09
Metaphorical	5.73 (2.63)	6.67 (2.49)	.08	.37
Number of waking-life elements	7.20 (3.59)	10.84 (5.63)	<.001**	.77

Note. *Significant at the p < .05 level, **Significant after stepwise Bonferroni correction

dream following the discussion and the Exploration-Insight subscale of the GDI. This was a small, non-significant correlation r^s = .26, p = .10. Likewise, no correlation was found between metaphorical perception and either type of "aha!" experience, ps > .05.

Hypothesis 4 was not supported: insight scores did not correlate with metaphorical perception of the dream after the dream discussion.

However, it is worth reporting some exploratory analyses following further investigation of the other items on the GDI. There was a strong correlation between GDI item 5 and metaphorical perception of the dream following the dream discussion (r^s = .54, p = .006). This item was "I got ideas during the dream session for how to change some aspect(s) of myself or my life". There were also some moderately strong correlations with two other items of the GDI: item 8 ("I felt like I was very involved in working with this dream during the dream session"), r^s = .47, p = .02, and item 12 ("I learned things that I would not have thought of on my own"), r^s = .42, p = .04.

4. Discussion

Both Exploration-Insight and Continuity Insight scores were significantly higher following the dream discussion than the event discussion, but Personal Insight scores were not. However, scores for Personal Insight from dream discussion in the current study were comparable to those in Edwards et al. (2015): a mean of 6.24 in the current study, compared to 6.60 for the Ullman method and 6.69 for the Schredl method in Edwards et al., non-significant differences for both comparisons. Therefore the Schredl method is just as effective for Personal Insight, but the discussion of the waking-life event also was very effective for Personal Insight.

Additionally, the wide variability between participants' insight scores illustrates that the method was extremely efficacious for some participants (who scored the maximum possible score across all insight measurements) and almost not at all for others (who had very low insight scores). This difference could not be accounted for by participants' dreamwork experience, as this variable had no effect on any of the insight measurements. Thus, other factors must account for the variability between participants' scores. Further research is needed to understand why some participants – all presumably with a positive attitude towards dreams given the self-selecting nature of the sample – scored very highly for insight and others scored very low.

The variability in participant scores tallied with the researchers' subjective experience of the sessions: some sessions flowed very smoothly, with participants talking much more than the researchers, and some discussions lasting over an hour; whereas in others, participants talked relatively little, and some discussions lasted less than half an hour. While accounting for these differences is beyond the scope of this study, some possible factors of influence arose from the researchers' experiences during the study. First, motivation: whether the participant is expecting to be active in the discussion or hoping to have their dream interpreted for them. Second, age and power dynamic: there was a noticeable difference in terms of rapport between younger participants who were also the first author's students, and the older / more experienced participants. Third, the extent to which the participant enjoyed the method: the Schredl method is cognitively oriented, which may suit some individuals well, whereas others may be more familiar or comfortable with other approaches such as the Ullman technique, or methods that come from psychoanalytic, artistic, somatic, or other approaches. Fourth, the researchers: their experience levels, and their in-the-moment engagement, focus, and alertness. These are only a handful of potential variables of influence, based on our experience of the sessions; it is likely that there are others.

The fact that there were no differences in any of the measurements investigated between experienced and inexperienced participants was a particularly interesting finding. It did not support our hypothesis, and moreover did not reflect our experience of the research. During the course of the study, we felt that the experienced participants were generally more involved with the discussions, so both for theoretical reasons and based on our experience of the research, we expected to find significant differences between the two groups. It is even more surprising in light of the demographic differences between the groups, particularly age: the experienced participants, as might be expected,

were often older than the inexperienced ones. The fact that no differences were found between the groups is, however, encouraging: it suggests that dreamwork can be efficacious irrespective of the dreamworker's level of experience, and irrespective of the facilitator's subjective experience of the session.

In attempting to understand how insights are arrived at as a result of the dream discussions, correlations were performed between the insight measurements and metaphorical perception of the dream following the dream discussion. It was hypothesised that insights may arise following the perception of a metaphorical connection between the dream and waking life. However, no significant correlations were found between metaphorical perception of the dream and any of the insight measurements (Exploration-Insight, Personal Insight, and Continuity Insight), so this hypothesis was not supported. However, metaphorical perception of the dream following the discussion did strongly correlate with item 5 of the GDI, "I got ideas during the dream session for how to change some aspect(s) of myself or my life", an intriguing finding worthy of further investigation. Understanding this relationship is beyond the scope of this article, but is the subject of a qualitative analysis of the transcripts of some of the participants in the present study (Malinowski et al., in prep).

Since Continuity Insight scored very highly after the dream discussion, it is unsurprising that items derived from the unpublished Continuity Questionnaire (Malinowski & Horton, 2013) that measured the dream's continuity with waking life increased in magnitude after the discussion. Participants saw significantly more continuity with aspects of their current waking life, and reported a significantly higher number of connections with waking life after the dream discussion than they had reported immediately prior to it. There were also trends for participants to see more continuity with their past waking lives and more metaphorical continuity after the discussion compared to immediately prior; these latter effects did not quite reach statistical significance but had medium effect sizes.

Some limitations of the research should be noted. Sessions were not timed to be identical between dream and waking event discussion, which allows for the possibility that the differences in insight found between the dream discussion and the event discussion was due to the amount of time spent discussing each. Dreams were discussed for six minutes longer, on average, than waking-life events. However, to have cut dream discussions short or to have artificially extended waking-life event discussions may inadvertently control for the very feature that we were investigating: it may be that particularly insightful dreams require lengthier discussions, and/or that the generation of insight leads to longer discussions. Furthermore, discussion length did not correlate with insight scores for either condition.

Two other limitations of the method that only became apparent during the course of the study were the types of questions asked about the sessions, and fatigue. Some participants found answering the questions about their dreams and events using a Likert-type scale difficult or even upsetting (i.e. converting how they felt subjectively about the dream into an integer), so it is recommended that alternative methods of obtaining these kind of data are used in future, such as a Visual Analogue Scale. In terms of fatigue, running the two discussions consecutively was tiring, including for the researchers but especially for the participants, and although the effects were mitigated as far as possible with breaks and by counterbalancing the conditions, future researchers applying this type of method may wish to consider holding the discussions on different days.

The experimental nature of the research reduced the ecological validity of it; in dream groups and in clinical dreamwork alike, it is unlikely that dreamwork would take place over only one session. Typically, dream groups meet regularly over time, and therapists work with clients over numerous sessions. The time-consuming nature of this experimental type of dreamwork research does not lend itself easily to such longitudinal work, but this is very much needed in dreamwork efficacy research. Importantly, research needs to be carried out to find out which methods work in which situations and with which types of individuals. This study has highlighted that the Schredl method worked extremely well for some participants and not as well for others, and some of the reasons for this have been speculated upon, but no clear answers have emerged yet.

The dreamwork research field is still very young; the doors are wide open. Cross-sectional, experimental work needs to be supplemented with in-depth qualitative research and longitudinal research. Other measures of efficacy and outcome need to be tested – insight is only one way to assess what the dreamer gained from the session. Other gains might include stress reduction, a feeling of connection to others in the dream group, there may be spiritual or well-being outcomes, and so on. Other control conditions should be devised and tested against, and other methods of dreamwork should be researched.

5. Conclusion

The "Listening to the Dreamer" method of dreamwork (Schredl, 2015) led to significantly higher levels of Exploration-Insight and Continuity Insight in comparison to a waking-life event discussion, and while levels of Personal Insight did not differ between the two conditions, they were not significantly different from previous non-clinical dreamwork experiments. Dreamwork discussions led to greater perception of continuity between the dream and aspects of waking life than had initially been perceived. The difference in levels of insight could not be explained by the participants' level of experience with dreamwork. The correlations expected between the three measurements of insight (Exploration-Insight, Personal Insight, and Continuity Insight) and metaphor perception were not found, but metaphor perception was found to correlate with an item measuring participants coming up with ideas for how to change some aspect(s) of themselves or their lives, which is worthy of further research.

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